

FIG. 1

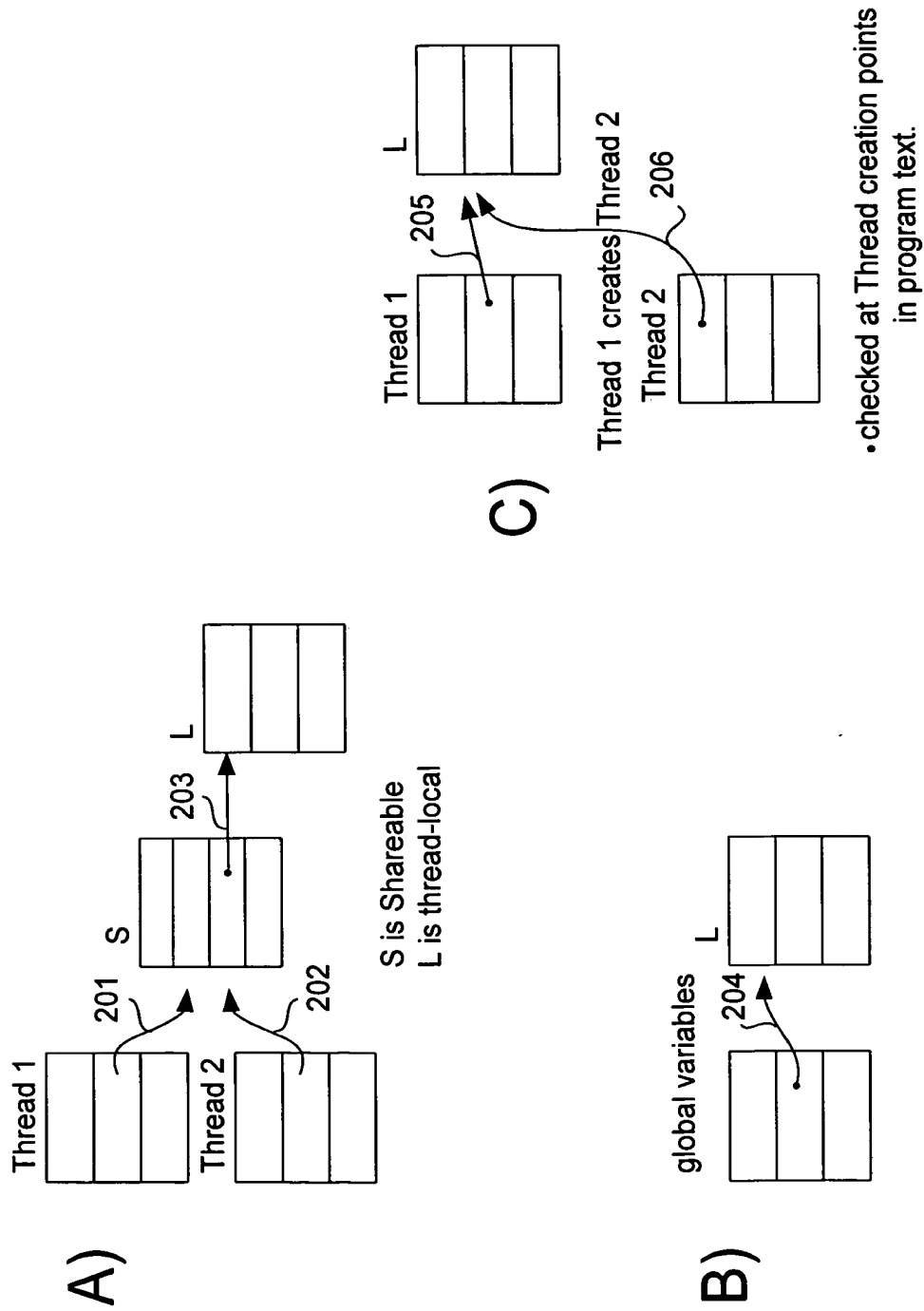


FIG. 2

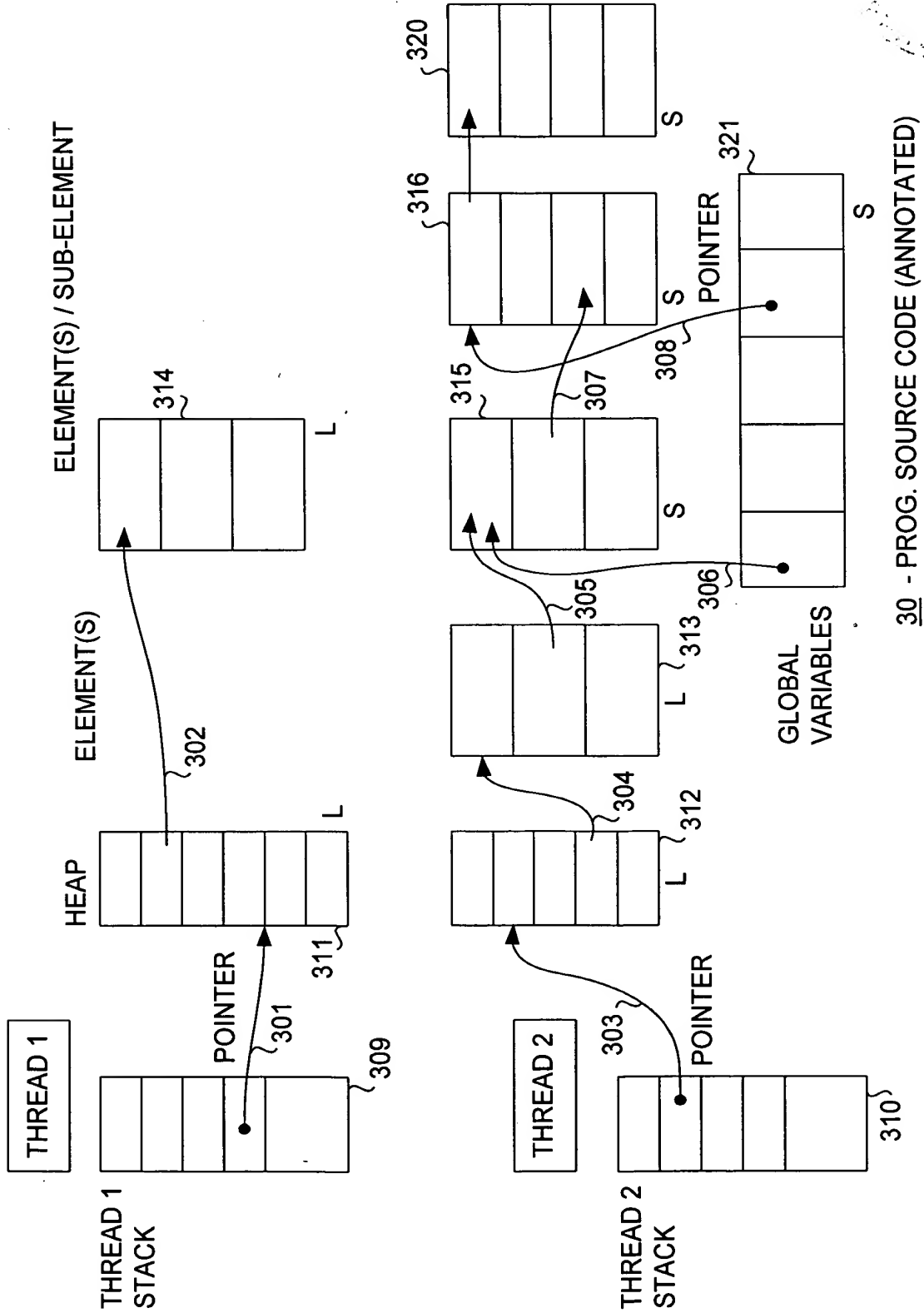
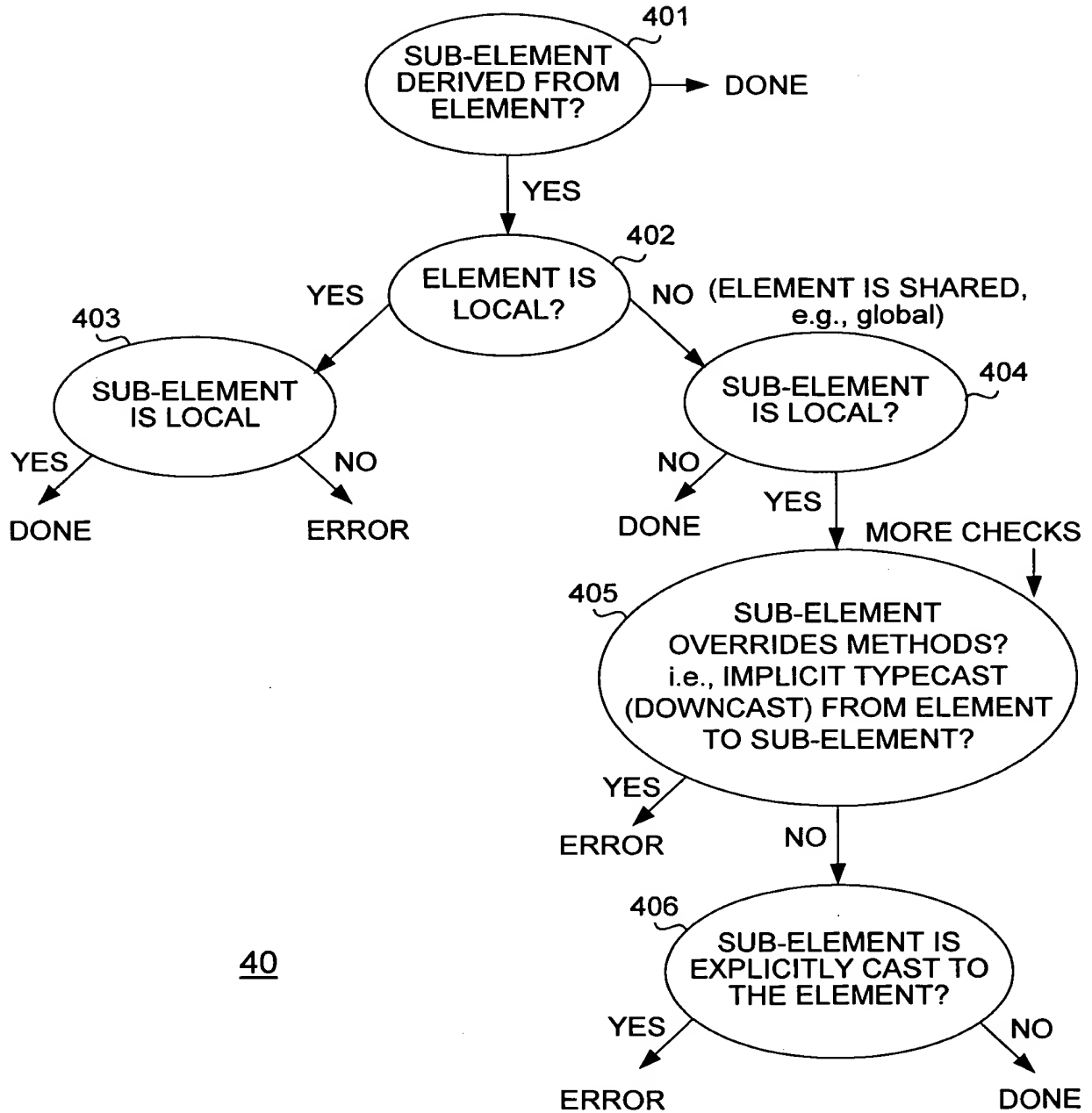


FIG. 3

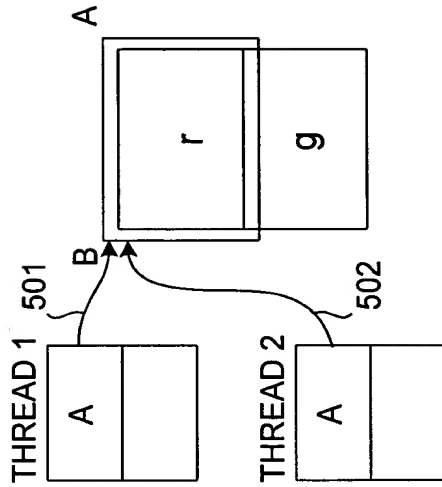
**FIG. 4**

MORE CHECKS:

```
thread shared class A {
    Object f;
    void foo() { ... }
}
```

```
thread local class B extends A {
    Object y;
    void foo() { ... this.g ... }
}
// of type B
```

Create a B object
 cast it to type A
 Pass it between threads
Cast it back to type B
 and access fields of B.



(typecasts)
 OK if no downcasts from A to B

- explicit c is of type A
 $d = (B)c$
 $d.g$
- implicit
 c is of type A (but actually points to a B object)
 $c.foo()$

FIG. 5

```

error:
thread local  class A {
    Object f;
}

thread shared class B extends A {
    Object g;
}

```

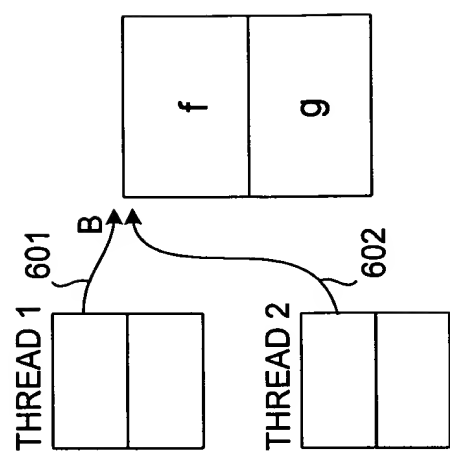


FIG. 6